# A Visitor Use Management Strategy
# for the Mount Desert Island Section
# of Acadia National Park
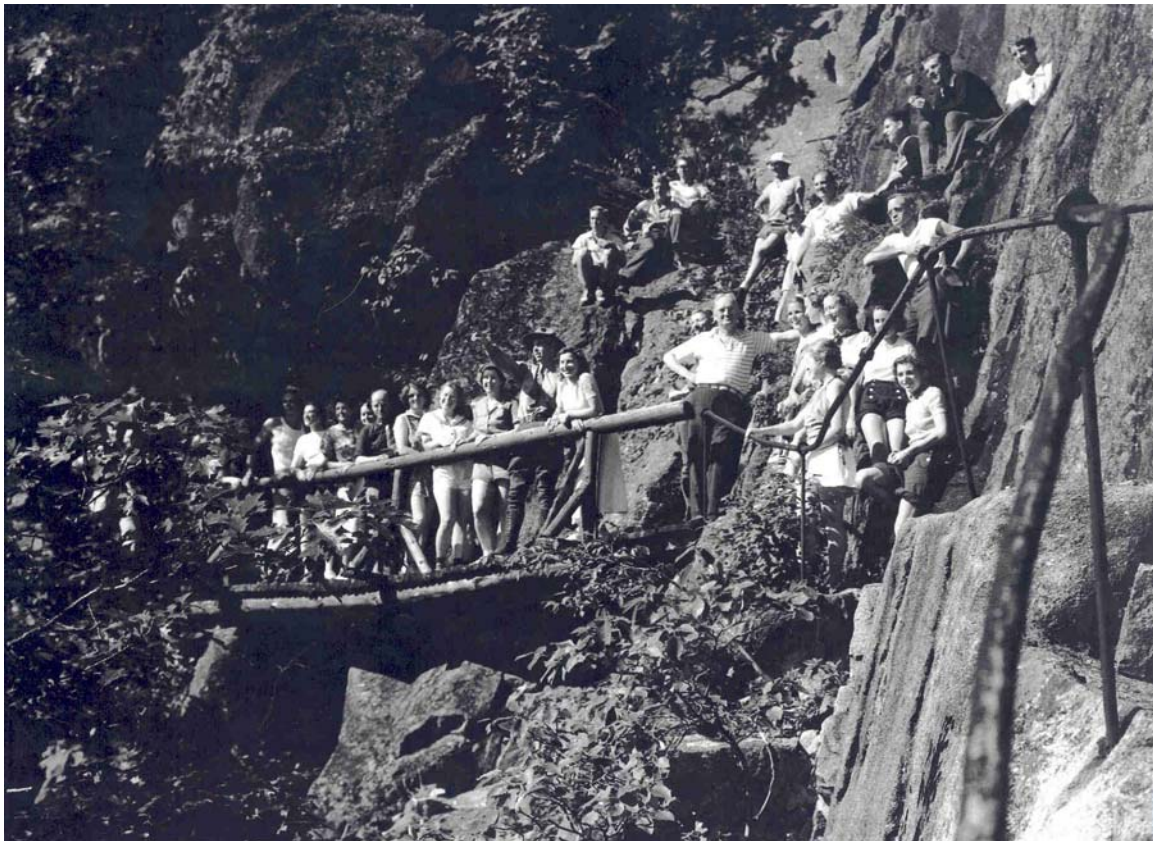
**INTRODUCTION**

The 1992 General Management Plan (GMP) for Acadia National Park (NPS 1992) recommends the implementation of a parkwide visitor management strategy. This report outlines a preliminary version of such a strategy for park lands on Mount Desert Island (MDI). Visitor management strategies for the Schoodic and Isle au Haut units of the park will be addressed separately. A visitor capacity (or capacities) may be a part of this visitor management strategy. Full implementation of this effort is expected to take ten years or more and require much public involvement. The strategy is a work in progress and will continue to evolve. This report will:

1. describe National Park Service (NPS) goals and the direction from the GMP;
2. identify the core issues as they are now understood;
3. describe already completed and ongoing activities;
4. list short-term mitigation actions that can be continued or initiated now;
5. articulate a range of ideas from which long-term actions may be selected, developed, and organized into a coordinated strategy;
6. discuss planning options and public involvement.

Acadia National Park staff, local residents, and visitors have long been concerned with the high level of visitation to the park and the effects of this visitation on resources, visitor experiences, park infrastructure, and the quality of life within the local community. Acadia receives about 2.7 million visits annually, with most of that occurring from Memorial Day to Labor Day. The vast majority of these visits (and their effects) occur on the MDI part of the park where most of the major attractions are located.

A visitor capacity charrette (workshop) hosted by the park in August 2001 noted the difficulties of managing visitor use on MDI:

1. uncontrolled access from State and town roads,
2. large numbers of visitors participating in diverse activities,
3. uneven spatial and temporal distribution of use;
4. fragmented geography of park lands with many entry points;
5. strongly interdependent relationship between the park and local communities that rely on tourism to varying degrees, and
6. limited park staff or funding to implement any program or actions (NPS 2002).

**GOALS**

Based on NPS legislation and policy and the Acadia National Park GMP, the National Park Service seeks to manage visitor numbers and behaviors and vehicular traffic and parking in the MDI section of Acadia National Park:

1. To preserve park resources unimpaired for current and future generations;
2. To manage levels of crowding and congestion to ensure a diversity of high quality visitor experiences, including those characterized by a higher degree of solitude.

These goals must be accomplished with the full and open participation of the public (local and national) and within the limits of park facilities, staff, and budget.


## BACKGROUND: ACADIA NATIONAL PARK GENERAL MANAGEMENT PLAN

The 1992 Acadia National Park General Management Plan (GMP) is the foundation for this strategy. The GMP offers important, substantive guidance and recommendations for managing visitor use. We review these below, citing the GMP directly.

Relevant GMP objectives include the following:

> Improve visitor's understanding of their impact on park resources. Develop carrying-capacity objectives and measures for the park or parts of the park (NPS 1992: 28).

> Provide for a variety of high-quality, resource-related visitor experiences while ensuring a safe and positive social environment (NPS 1992: 28).

> Preserve the opportunities for recreational activities that range from high density to low density and solitude (NPS 1992: 28).

> Preserve the relatively undeveloped quality of the park on the West Side of Mount Desert Island and on Schoodic Peninsula and the islands (NPS 1992: 28).

Relevant GMP action items include the following (we note actions completed after each section)

> **Manage Visitor Impacts**

> **Mitigate Resource Impacts from Visitor Use.** The National Park Service will manage use to protect Acadia's resources. Use of offshore islands that serve as important nesting and breeding sites will be prohibited during critical seasons. Other areas where access might be limited include the summits of Cadillac, Penobscot, Sargent, Champlain, and Pemetic mountains; Little Moose Island; and Big Heath. Parking for these areas will be confined to existing lots with no overflow and no right-lane parking on the Park Loop Road. Public restrooms will be provided at Thunder Hole, Eagle Lake, Acadia Mountain, Pretty Marsh picnic area, and Lake Wood. Large vehicles will be prohibited from Stanley Brook Road. Impacted areas will be rehabilitated; for instance, on Cadillac Mountain summit, stairways may be removed and dirt trails revegetated in conjunction with an interpretive effort on the fragility of the area (NPS 1992: 35).

Rest rooms have been constructed at the named locations and several others  Many impacted areas have been rehabilitated, although not the example cited for Cadillac Mountain.

**Retain Opportunities for Low-Density Recreation on the West Side of Mount Desert Island and on Schoodic Peninsula and the Offshore Islands.** Existing capacity of parking lots will be enforced on Mount Desert Island and Schoodic Peninsula, and offshore islands will be patrolled in order to retain the natural environment and solitude of these parts of the park. Schoodic Peninsula and the offshore islands will not be actively promoted nor will additional facilities be provided in these areas. The intent is to retain current use levels and the existing naturalness and solitude of these parts of the park (NPS 1992: 35).

The park does not actively promote Schoodic Peninsula and the islands. Offshore islands are now patrolled to a limited degree. A GMP Amendment is underway for Schoodic because of park acquisition of the former Navy base.

**Close Valley Cove Road to Motorized Vehicles.** Hiking and biking will be permitted, but this road will be closed to motor vehicles from a point near Fernald Point Road. This action will minimize congestion at Valley Cove and enhance the remote character of the area. Pulloff parking will be provided on the short section of the road open to vehicles in place of parking at the Valley Cove end (NPS 1992: 35).

Valley Cove Road was closed and a small parking area constructed as described.

**Encourage Public Transportation on Mount Desert Island and Establish a Park Transportation System.** Visitor surveys and comments at public meetings indicated strong interest in a shuttle-bus system as a way of reducing congestion and avoiding construction of more roads or parking areas, thereby protecting environmental quality and improving the visitor experience. The Park Service will actively participate with municipalities and others on Mount Desert Island to offer tourists and residents an islandwide transportation system that includes loops through the park. The Park Service will study transportation issues in and around the park with the goal of implementing a transportation system as an alternative to or replacement for private automobile access (NPS 1992: 36).

The Island Explorer bus has proved to be a great success, and now provides islandwide transportation during the summer season. Additional transportation studies and joint planning efforts continue.

**Limit Parking to the Capacity of Existing Lots.** Parking will be eliminated from the right lane of the Park Loop Road wherever road geometry poses a safety hazard. Right-lane parking will be eliminated if an alternative transportation system is successfully established. This action will enhance scenic driving by removing the safety concerns, traffic flow restrictions, and visual impact of right-lane parking. Parking will be permitted only in designated spaces in established lots, and vehicle size will be restricted in lots where turning space is limited. The cooperation of the state and towns will be sought to eliminate overflow parking along state highways.

No new parking areas will be constructed along the Park Loop Road, and no existing parking areas will be expanded except at Wildwood Stables. Additional parking will be provided at Eagle Lake and at the head of Valley Cove Road (to replace existing parking at

Valley Cove). Visitors will be encouraged to travel the Park Loop Road as a scenic drive-through and to use alternative access — including the alternative transportation system, trail links, carriage roads, and bicycle routes — for destination travel (NPS 1992: 36).

Visitors are encouraged to use the bus and two new connector trails that have been built. Roadside barriers have been installed at Jordan Pond and Bubble Pond. Traffic sensors have been installed in parking lots at Sand Beach, the Visitor Center, Jordan Pond, and Bubble Pond, and at park entrances on the east side of MDI. These sensors will measure the volume of traffic entering and exiting these sites. This information will be made available to the public through the Travelers Information Services radio and other media.

### Implement a Parkwide Visitor Management Strategy

**Collect Baseline Data and Evaluate Visitor Impacts.** The sociological and environmental impacts of visitor use will be researched and evaluated to establish carrying capacities and other visitor management strategies. These strategies will be targeted to specific subunits of the park. For example, segments of the Park Loop Road and the hiking trail and carriage road systems on Mount Desert Island or individual smaller islands may be identified for separate treatment. Research will define the physical, biological, and social conditions that the National Park Service seeks to create, restore, or maintain within each subunit (NPS 1992: 36).

A visitor capacity has been established for the carriage road system. Visitor capacity planning and studies are underway for Schoodic and Isle au Haut. Visitor impacts have been inventoried at a few locations. Visitor numbers are monitored on hiking trails and at several climbing areas, and spot visitor counts have been made for several other sites including Cadillac Mountain and Anemone Cave.

**Develop Management Objectives.** Based on the mission and management goals for Acadia and National Park Service policy, the Park Service will establish management objectives for specific areas of the park. These objectives will describe, as precisely as possible, the experiences to be offered to visitors and the appropriate ecological and social conditions to accompany each type of experience, and will address the issue of crowding. The park cannot be all things to all people. The objectives will therefore support opportunities appropriate to the traditional uses of Acadia (NPS 1992: 36).

Management objectives have been specified for the carriage road system only.

**Select and Implement Management Techniques.** There cannot be a single carrying capacity for all of Acadia National Park. It is therefore important to identify subunits of the park and define specific management objectives for these areas. Defining specific numbers of visitors to be accommodated in each use zone is neither the only nor often the best technique to manage visitor impact. A variety of direct and indirect approaches may be implemented to deal with the causes of visitor impact. Management may, for example, prohibit use near nesting sites at certain times, separate incompatible uses at campgrounds, require reservations for programs, limit the size of personal vehicles allowed on Cadillac Summit Road, or promote high-density over low-density areas (NPS 1992: 36-37).

Several trails are closed annually to protect nesting peregrine falcons. Seawall and Blackwoods Campground rehabilitation will help mitigate camper conflicts. Barriers have been installed to manage foot and bicycle traffic to reduce impacts to soil and vegetation on Cadillac Mountain, at Eagle Lake, and numerous other locations. Leave No Trace education to reduce visitor impacts is actively promoted in programs, on signs, through personal contacts, and through the media.

> **Monitor Visitor Impacts.** Implementing management techniques will proceed with a standardized monitoring program. Key indicators identified for Acadia National Park will permit the social, physical, and biological impacts of visitors to be monitored and compared with standards adopted for specific areas of the park. Appropriate management techniques will be implemented following analysis (NPS 1992: 37).

Visitor impact inventories have begun at a few sensitive sites to set a baseline for monitoring.

## ISSUES

The symptoms of overuse can be distilled to two equally important core issues listed below. Sometimes both of these issues are represented at the same time and place. Other times one of them is especially acute at a particular location.

**1. Too many vehicles in the park at certain places and times.** Because of limited space in designated parking lots, visitors park vehicles on road shoulders and in the right lane of the Park Loop Road. In addition, private vehicles and commercial buses enter the park at such a high rate during certain hours that roadways and parking areas become congested (traffic slows or stops). These visitor activities degrade resources (loss of soil and vegetation) and possibly visitor experiences (frustration level, esthetics, focus more on driving carefully and less on enjoying drive), and create safety problems. No information is available on how these driving and parking issues affect the quality of the visitor experience. In some cases, poor design contributes to the problem (e.g. Jordan Pond House), but generally, the root cause appears to be too many vehicles.

**2. Too many visitors in the park at certain places and times.** Heavy visitor use at major attraction sites has resulted in degraded resources (eroded trails, visitor-created trails, loss of soils and vegetation,) and possibly visitor experiences (crowding, loss of solitude, visitor conflicts, lines at rest rooms). No information is available on the quality of the visitor experience at major attraction sites like Cadillac Mountain or low use areas such as Norumbega Mountain or Hunters Brook Trail. Park staff are especially concerned about the loss of solitude in low use areas if overall use continues to increase. Poor design and construction, limited staff and funds for maintenance and management, and uninformed visitor behavior contribute to the problem in some specific areas, but the root cause appears to be too many visitors.

# CURRENT VISITOR MANAGEMENT ACTIVITIES FOR MDI

Park staff are already conducting many activities directed at visitor management on MDI. Some of these have been mentioned in reference to the GMP, but are repeated here. We look to build on these strengths. These current activities are listed below, organized by the two major issues:

**Vehicles:**
- Continue and expand the Island Explorer service;
- Implement real time traffic information via Intelligent Transportation Systems Technology;
- Plan for a transportation hub and new visitor center;
- Install barriers (stones, fences) and erect signs to restrict parking and visitor access to certain sites;
- Continue parking enforcement;
- Coordinate cruise ship bus tours with the Bar Harbor Chamber of Commerce;
- Complete a prospectus for local bus tour concessions;
- Work with Bar Harbor Chamber of Commerce to gather data on motor coach use in the village and in the park.

**Visitors:**
- Monitor visitor capacity on carriage roads;
- Monitor hiking trail and summit use;
- Maintain exclosures and educational signs on Cadillac Mountain;
- Study visitor behavior on Cadillac Mountain;
- Continue Leave No Trace low impact education efforts;
- Implement Acadia Trails Forever rehabilitation;

Many of the above actions are indirect—monitoring, studying, planning— but they will eventually provide a framework for more direct management actions for vehicles and visitors.

Full implementation of the Commercial Services Plan (NPS 2000) also addresses visitor management on MDI in a number of ways, although some approved actions are several years out. Local concession bus tours will eventually be converted to smaller, clean-burning vehicles. Motor coach tours will be managed to relieve traffic congestion and avoid overwhelming park facilities with visitors. The number of commercial use authorizations issued for specific activities may be limited, or some activities may be converted to a concession. The number of visitors served by Wildwood Stables will be capped. Vehicle size may be controlled on certain park roads and parking areas.

Participating in MDI Tomorrow planning may influence how the park deals with visitor management on MDI issues as well. In addition, ongoing visitor capacity studies and planning for Isle au Haut and visitor capacity studies and GMP planning for Schoodic will help inform the approach on MDI.

# VISITOR USE MANAGEMENT STRATEGY

As noted, the GMP calls for the implementation of a parkwide visitor management strategy.  In a sense, the implementation began with the visitor capacity charrette and continues with this visitor management strategy document.  It will bring together all visitor management recommendations from the GMP that have not yet been addressed.  The overriding question and scope for this strategy is how the NPS will manage visitor use and visitor numbers for park lands on MDI.  We now describe short-term actions and long-term ideas for continuing to implement the GMP recommendation.

## SHORT-TERM ACTIONS

In the short-term, the visitor use management strategy already includes continuing or completing the current visitor management activities already listed.  Additional short-term actions planned or underway include the following, organized by issue (some actions address both issues):

### Vehicles:
- Develop short-term strategies for the Jordan Pond House area to alleviate parking, circulation, and wayfinding problems with minimal change in existing infrastructure;
- Obtain greater entrance fee compliance throughout the park through education and signs;
- Report daily visitation/congestion to the public so they can make informed decisions;
- Work with the state and towns to develop a means of roadside parking enforcement at park access points on state and town roads bordering the park;
- Monitor commercial use numbers, activities, and impacts;
- Measure traffic volume and flow patterns;

### Visitors:
- Inventory/monitor visitor impacts on Cadillac, along Ocean Drive and at other sites;
- Develop educational exhibits for concession gift shops, especially Cadillac;
- Develop stewardship messages for LL Bean catalogue.

## LONG-TERM STRATEGY

Because of the difficulties of managing visitor use on MDI, a long-term visitor use management strategy will take time to develop.  The National Park Service recognizes that a successful strategy will likely have the following characteristics:

1. It will be based on broad public involvement (national and local) as required by the National Environmental Policy Act;
2. It will require extensive dialogue with and cooperation from local town governments and communities;
3. It will require a substantial education effort to gain and maintain public acceptance and support;

4.  It must be relatively easy for staff to administer and for visitors to understand.  Because of the uneven spatial and temporal distribution of visitor use, when and where the strategy or particular actions apply will be a key decision;
5.  It will evolve to some degree through experiment, testing ideas through action, evaluating them, and moving forward with what works;
6.  It must move ahead, to the extent possible, in an integrated fashion park-wide to avoid the balloon effect of shifting problems to other places or times of day;
7.  It will be based on the best available scientific research, NPS legislation and policy, and public comments.

A number of *ideas* have already been developed that could become part of a long-term visitor use management strategy.  These were derived from many sources:  the ANP General Management Plan (NPS 1992), the visitor capacity charrette report (NPS 2002), the park Commercial Services Plan (NPS 2000) and other implementation plans, the development of the Island Explorer bus service, suggestions from visitors and local residents, and the experiences of park staff at Acadia and elsewhere.

These *ideas* are presented in Table 1, organized by where they might fit in a timeline, *if adopted as part of a coordinated strategy*.  All of these ideas, directly or indirectly, address the issues of too many vehicles or too many visitors.  We must emphasize that these are simply ideas based on our current understanding of the issues.  These ideas may be dropped, modified, adapted, or expanded following research and public input.

Some of these ideas will require further public involvement; others have already been endorsed through the public involvement process of the General Management Plan.  Ideas from the GMP are now ten years old or more, and may require review by the public to ensure they remain valid.

The research and planning to develop a visitor management strategy is expected to take five to ten years.  The planning process may take one of two paths.  One route would be to develop a comprehensive visitor management planning document with several alternatives presented for public comment.  A second would involve several smaller scale planning processes, each with its own set of alternatives and planning/ public involvement.  These might be for discrete geographic subunits of the park or for park-wide policy issues, as for example developing an equitable and manageable entrance fee structure accounting for visitors entering via Island Explorer buses.  At this time, it is unclear which path is most appropriate.  During the planning period, park managers will to continue to take other short-term actions as described herein.  These short-term actions will be consistent with existing planning documents and the development of a long-term visitor management strategy.  They will also protect resources and ensure high quality visitor experiences.

The first step toward a visitor management strategy is to determine which of the above paths/planning processes to take.  This determination still requires further thought, analysis, and

| Table 1: Visitor Management Strategy Ideas for Acadia National Park Lands on Mount Desert Island | | |
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| *(Italics indicate ideas that may require public involvement under the National Environmental Policy Act)* | | |
| | **1-5 years** | **6 years +** |
| Planning | Begin dialogue with local communities about visitor management planning, beginning with the development of a shared vision and issue identification.<br><br>*Develop detailed zoning for desired resource conditions and recreation opportunities; identify areas at risk, especially low use areas.*<br><br>*Concurrent with visitor management research, conduct planning and compliance (NEPA) for subunits of the park.* | *Begin new GMP process with emphasis on visitor capacity.* |
| Research | Conduct visitor management research for subunits of the park: e.g., Cadillac, Jordan Pond, Park Loop Road, low use areas.<br><br>Study travel patterns and develop simulation model of visitor traffic on MDI/in park.<br><br>Conduct transportation design/feasibility study for Park Loop Road | |
| Management | Conduct bus-only test for Park Loop Road including Cadillac Mtn.<br><br>*Develop new entry fee structure, coordinated with Island Explorer bus, encouraging bus use and discouraging private auto use.*<br><br>*Establish maximum length/height for oversize vehicles, and develop implementation strategies, especially for motor coaches.*<br><br>Build acceptance and support for visitor management strategies with visitors and neighbors.<br><br>Limit parking to capacity of existing lots (from GMP).<br><br>Eliminate parking in right lane of the Park Loop Road (from GMP)<br><br>*Develop parking plan for park.*<br><br>Consider "no net gain" approach to parking that allows trade-offs. | *Explore option to prohibit cars from Park Loop Road during peak use periods*<br><br>*Set a limit on the number of cars allowed on the Park Loop Road per day or per hour.*<br><br>*Limit number of daily park passes sold.*<br><br>*Implement reservation system for entry to park or parts of park.*<br><br>*Deliver visitors to Cadillac Mountain via public transit.*<br><br>*Implement visitor capacity plans for subunits of the park.*<br><br>*Set visitor limits for at-risk areas to protect natural resources or visitor experiences.* |

consultation.  For either path, the process should start with meetings that include local communities and other interested stakeholders.  The purpose of these meetings would be to identify and validate the issues and to develop a shared vision of Acadia 10-15 years from now. Park staff have set a goal of completing this part of process by the spring of 2004.

Perhaps the second step is to begin to gather new information from research.  The NPS will enter an agreement with the University of Vermont to begin conducting social science research at Acadia (MDI) in the summer of 2003. The research will be directed at visitor management issues, including the option of establishing visitor capacities where appropriate.  Resource impact studies related to visitor capacity may be included as well.

## AT- RISK AREAS

As this process moves forward, it will be guided by a preliminary set of at-risk areas identified by park staff.  At-risk areas are those where resources or visitor experiences are most threatened by visitor use activities.  These at-risk areas are described below, grouped as high use and low use sites, and listed in priority order.  Carriage roads are not included because they have their own visitor capacity management for high and low use zones.  Carriage road parking areas were considered for the high use list.  These at-risk areas will receive more attention through implementation of the short-term strategies listed previously.  They may also be targeted for specific smaller scale (though no less important) National Environmental Policy Act planning as described above.

**High Use:**  Cadillac Mountain summit; Jordan Pond House area; Sand Beach to Otter Point area; Eagle Lake parking;  Acadia Mountain parking; North Ridge Cadillac parking; and the Route 102a corridor (Ship Harbor, Wonderland, Bass Harbor Lighthouse, Seawall area).

Note:  Much of the Park Loop Road corridor (but not all), including associated trails and carriage roads, is intensively used.  There are other sites with relatively high use—they are generally access points for trails, carriage roads, and lakes.  Parking problems at the three areas listed are especially acute.

**Low Use:**  Hiking trails on Western Mountains, Day Mountain-Triad, Pemetic Mountain, and Norumbega Mountain.

Note:  There are other relatively low use trails, and relatively low use on several gravel roads and fire roads.

Natural resources on all summits are also at risk.  A short growing season, shallow soils, and sensitive plants (some rare) may be affected by even low to moderate visitor use.

## SUMMARY

The development of a visitor use management strategy for park lands on MDI is very complex. It will take much time and much public involvement through one or more planning processes, subject to National Environmental Policy Act compliance. Park staff will play a major role, but other NPS staff, and/or consultants may have a role as well.  For park staff, taking on such a challenging project may mean that other park programs or activities receive less attention.  Local communities will also play an essential role.  The strategy will continue to evolve as new information becomes available.  Many short-term mitigation measures can and will be taken (or will continue) over the next several years as a long-term strategy develops.  However, it is important that this process begin now to ensure the health of Acadia's resources and the quality of the visitor experiences it offers.  Park staff and other observers agree this will be the most significant undertaking since the development of the GMP, and it will have far-reaching effects.

## REFERENCES

National Park Service
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